

## (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date  
12 February 2004 (12.02.2004)

PCT

(10) International Publication Number  
**WO 2004/014084 A1**

(51) International Patent Classification<sup>7</sup>: **H04N 7/30**

(21) International Application Number:  
**PCT/IB2003/003130**

(22) International Filing Date: 9 July 2003 (09.07.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
02/09746 31 July 2002 (31.07.2002) FR

(71) Applicant (for all designated States except US): **KONINKLIJKE PHILIPS ELECTRONICS N.V. [NL/NL]**; Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **LESELLIER,**

Estelle [FR/FR]; 156 Boulevard Haussmann, F-75008 Paris (FR). MIRO SOROLLA, Carolina [ES/FR]; 156 Bd Haussmann, F-75008 Paris (FR). RUOL, Vincent [FR/FR]; 156 Bd Haussmann, F-75008 Paris (FR).

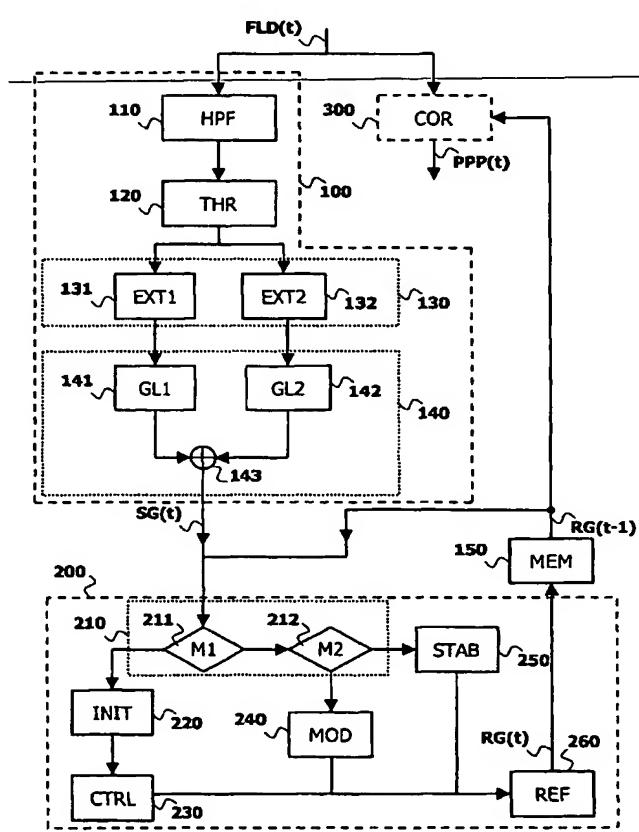
(74) Agent: **CHAFFRAIX, Jean**; Société Civile SPID, 156 Boulevard Haussmann, F-75008 Paris (FR).

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,

*[Continued on next page]*

(54) Title: DYNAMIC DETECTION OF BLOCKING ARTEFACTS



(57) Abstract: The present invention relates to a method of processing a sequence of digital images, intended to detect, in a dynamical manner, a grid comprising blocking artefacts. Said method comprises the steps of, a) detecting (100) a current spatial grid (SG(t)) within a portion of the image constituted by a current field (FLD(t)), b) determining (200) a current reference grid (RG(t)) from a current spatial grid (SG(t)) and a preceding reference grid (RG(t-1)) supplied by a memory MEM (150), the current reference grid (RG(t)) being subsequently stored temporarily in the memory MEM (150), and c) correcting COR (300) blocking artefacts which are present in the current field (FLD(t)) from the preceding reference grid (RG(t-1)) so as to supply a processed field (PPP(t)).